

WST97AUSA

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1(Cancelled).

2(Previously Presented). The nucleotide sequence according to claim 6, comprising

- (a) SEQ ID NO: 1 or
- (b) the complete complement of SEQ ID NO: 1.

3(Previously Presented). The nucleotide sequence according to claim 2, which is synthetically or recombinantly produced.

4(Cancelled).

5(Previously Presented). The nucleotide sequence according to claim 2, which is present as a wild-type gene in normal human epidermal keratinocytes and normal human osteoblasts.

6(Previously Presented). An isolated nucleotide sequence that encodes a Chfr polypeptide SEQ ID NO: 2 that delays entry of a human cell into metaphase in response to mitotic stress.

7-22 (Cancelled).

WST97AUSA

23(Currently Amended). The reagent according to claim ~~24~~ 67, further comprising a detectable label.

24-42 (Cancelled).

43(Previously Presented). The reagent according to claim 23, wherein said label is a fluorescent label or an enzyme.

44(Currently Amended). The reagent according to claim ~~24~~ 67, wherein said nucleic acid ~~fragment~~ sequence encodes an amino acid fragment from within amino acids 31-103 of SEQ ID NO: 2.

45(Currently Amended). The reagent according to claim ~~24~~ 67, wherein said nucleic acid ~~fragment~~ sequence encodes an amino acid fragment from within amino acids 303 to 346 of SEQ ID NO: 2.

46(Currently Amended). The reagent according to claim ~~24~~ 67, wherein said nucleic acid ~~fragment~~ sequence encodes an amino acid fragment from within ~~encodes~~ amino acids 476 to 641 of SEQ ID NO: 2.

47-50 (Cancelled)

51(Currently Amended). The kit according to claim ~~49~~ 68, wherein said nucleotide fragment (i) or (ii) is attached to a detectable label.

52(Previously Presented). The kit according to claim 51, wherein said detectable label is a fluorescent compound or an enzyme.

WST97AUSA

53(Previously Presented). The kit according to claim 52, further comprising one or more components that detect said labels.

54(Currently Amended). The kit according to claim 49-~~68~~, further comprising a component selected from the group consisting of instructions for performing a PCR assay for the detection of the expression of a nucleotide sequence encoding Chfr polypeptide SEQ ID NO: 2, microtiter plates to which said nucleic acid sequences have been pre-adsorbed, diluents, buffers, applicator sticks, containers, and sample preparator cups.

55(Currently Amended). The kit according to claim 49-~~68~~, wherein said nucleotide sequence (i) or (ii) is synthetically or recombinantly produced.

56(Currently Amended). The kit according to claim 49-~~68~~, further comprising instructions for performing PCR on tumor cells of said mammal using said nucleotide sequence (i) or (ii).

57-60(Cancelled)

61(Currently Amended) The composition according to claim ~~60~~ 69, wherein said nucleotide sequence encoding Chfr is SEQ ID NO: 1 ~~or the complete complement thereof~~.

62(Currently Amended) The composition according to claim ~~60~~ 69, wherein said primers amplify a portion of said nucleotide sequence encoding Chfr.

63(Previously Presented) The composition according to claim 62, wherein said amplified portion is selected from the group consisting of nucleotides 66-562 of SEQ ID NO: 1, nucleotides 352-1055 of SEQ ID NO: 1, nucleotides 771-1376 of SEQ ID NO:

WST97AUSA

1, nucleotides 904-1753 of SEQ ID NO: 1, nucleotides 904-1772 of SEQ ID NO: 1, nucleotides 904-1902 of SEQ ID NO: 1, nucleotides 1187-1753 of SEQ ID NO: 1, nucleotides 1187-1772 of SEQ ID NO: 1, nucleotides 1215-1753 of SEQ ID NO: 1, nucleotides 1215-1772 of SEQ ID NO: 1, nucleotides 1214-1902 of SEQ ID NO: 1, and nucleotides 1625-2279 of SEQ ID NO: 1.

64(Previously Presented) The composition according to claim 62, wherein said amplified portion is selected from the group consisting of a nucleotide sequence encoding amino acids 31-103 of SEQ ID NO: 2; a nucleotide sequence encoding amino acids 303-346 of SEQ ID NO: 2; and a nucleotide sequence encoding amino acids 476-641 of SEQ ID NO: 2.

65(Currently Amended) The composition according to claim ~~65~~ 62, wherein said amplified nucleotide sequence is selected from the group consisting of nucleotides 180-399, nucleotides 557 to 1128 and nucleotides 1516-2013 of SEQ ID NO: 1.

66(Cancelled).

67(New): A reagent consisting of a nucleic acid fragment of the protein-encoding sequence of SEQ ID NO:1 or to the sequence antisense to SEQ ID NO: 1, wherein said fragment consists of between 12 to 30 or 14 to 50 nucleic acids in length.

68(New): A kit for detecting expression of a nucleotide sequence encoding the Chfr protein SEQ ID NO: 2 in mammalian cells, said kit comprising

- (i) a first nucleotide sequence of SEQ ID NO: 1 consisting of between 12 to 30 or 14 to 50 nucleotides in length; and
- (ii) a second nucleotide sequence of the antisense of SEQ ID NO: 1 consisting of between 12 to 30 or 14 to 50 nucleic acids in length.

WST97AUSA

69(New): A composition comprising a pair of primer sequences, said primer sequences consisting of

(a) a nucleic acid sequence encoding Chfr protein of SEQ ID NO: 2 consisting of between 12 to 30 or 14 to 50 nucleic acids in length; and

(b) a nucleic acid sequence of the antisense of the sequence encoding Chfr protein of SEQ ID NO: 2 consisting of between 12 to 30 or 14 to 50 nucleic acids in length.